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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,008	04/28/2005	Shuji Tabuchi	10873.1587USWO	1648

53148 7590 06/07/2007  
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MINNEAPOLIS, MN 55402

EXAMINER

KAYRISH, MATTHEW

ART UNIT	PAPER NUMBER
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2627

MAIL DATE	DELIVERY MODE
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06/07/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/533,008

Applicant(s)

TABUCHI, SHUJI

Examiner

Matthew G. Kayrish

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Khuu (US Patent Number 6081407).

Regarding claim 1, Khuu discloses:

A case comprising a bottom plate in a substantially rectangular shape (figure 5A, item 26), and a first side plate and a second side plate (figure 5A, items 76) rising respectively from a pair of border lines forming the bottom plate and facing each other (figure 5B, plates face each other), either one edge side orthogonal to the pair of border lines being an entrance (figure 5A, bottom of 26 is an entrance), an insertion being inserted toward the other edge side to be housed in the case (figure 6A);

Wherein, on an inner surface of the first side plate where the first side plate and the second side plate face each other, a first rib having a top face parallel to the inner surface of the first side plate is provided (figure 5A, item 78), with a height D1 between the inner surface of the first side plate and the top face of the first rib (figure 5A);

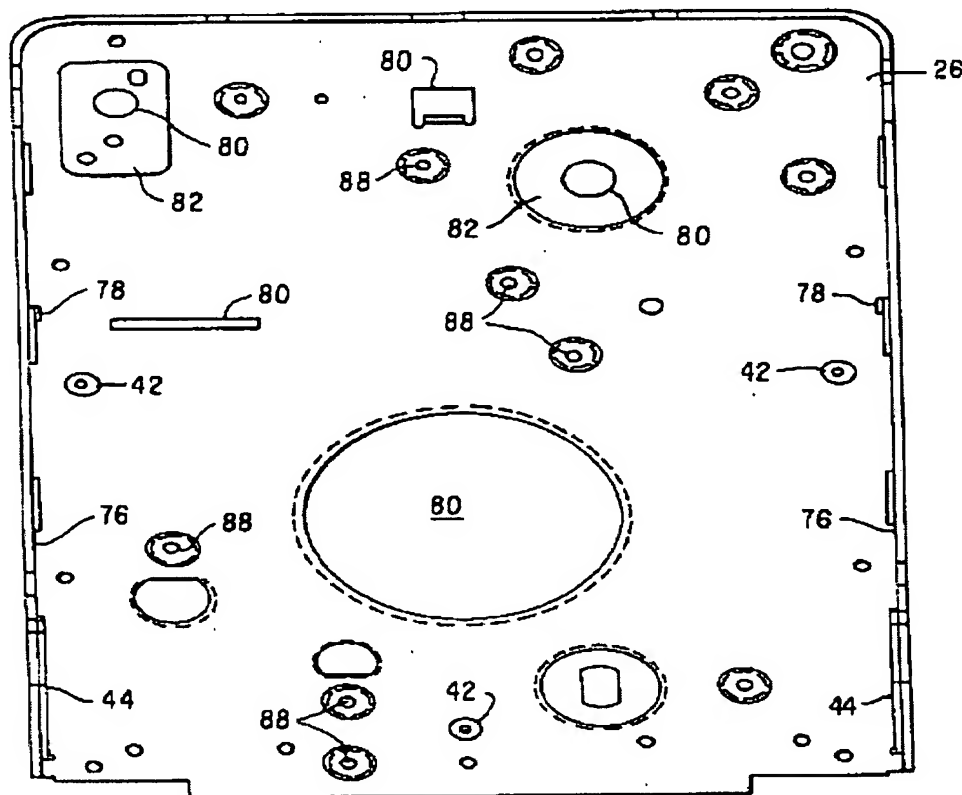
On an inner surface of the second side plate where the second side plate and the first side plate face each other, a second rib having a top face parallel to the inner

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surface of the second side plate is provided so as to face the first rib (figure 5A below), with a height D2 shorter than the height D1;

On the inner surface of the first side plate on the entrance side with respect to the first rib, a first protrusion having a top face parallel to the inner surface of the first side plate is provided with a height D3 shorter than the height D1 (figure 5A below); and

Both a spatial distance D4 between the top face of the second rib and the inner surface of the first side plate, and a spatial distance D5 between the top face of the first protrusion and the inner surface of the second side plate (figure 5A below) allow a width D6 of the insertion in a facing direction of the first side plate and the second side plate to be inserted with a loose fit (figure 7B, cartridge is loosely fit).

**FIG. 5A.**

Regarding claim 5, Khuu discloses the features of base claim 1, as stated in the 102 rejection above, and further disclosing:

A third side plate rising from the other edge facing the entrance via the bottom plate, with the same height as that of the first side plate and the second side plate (figure 5A, item 26 has a back wall).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-4 and 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Khuu (US Patent Number 6081407), in view of Inoue (US Patent Number 6590858).

Regarding claim 2, Khuu discloses the features of base claim 1, as stated in the 102 rejection above, but fails to specifically disclose:

Wherein on the inner surface of the first side plate on the entrance side with respect to the first protrusion (figure 22, item 72), a second protrusion having a top face parallel to the inner surface of the first side plate is provided (figure 22, item 73), with

the height D3, and on the inner surface of the first side plate between the first protrusion and the second protrusion, a rack is provided with a height D7 equal to or shorter than the height D3 (figure 22, item 71).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the case of Khuu with a rack, as taught by Inoue, because this will open and close the shutter of the cartridge upon insertion and ejection, as stated in column 3, lines 13-27.

Regarding claim 3, Khuu discloses the features of base claim 1, as stated in the 102 rejection above, and further disclosing:

The cartridge also includes a first partial stepped groove formed on a part of the first side wall, having a step in a direction toward the second side wall substantially at a center of the gap between the upper half and the lower half from an engagement line (figure 3, item 73) at which the first side wall is engaged with the front wall to the back wall, and a second partial stepped groove having a step in a direction toward the first side wall, formed on the second side wall at a position facing the first partial stepped groove (figure 3, item 72 is on both sides facing each other and approximately centrally located); and

The first protrusion and the first rib slide to contact the first partial stepped groove, and the second rib slides to contact the second partial stepped groove, whereby the cartridge is inserted into the case (columns 5 & 6, lines 60-67 & 1-2).

KhUU fails to specifically disclose:

Wherein the insertion is a cartridge including an upper half and a lower half that face each other with a gap for housing a disk-shaped information medium placed therebetween, an opening window portion for exposing a part of the disk-shaped information medium through the upper half and/or the lower half, a shutter for opening and closing the opening window portion, a front wall engaged with the shutter to connect the upper half to the lower half, a first side wall and a second side wall respectively being connected to the upper half and the lower half and to the front wall, and a back wall facing the front wall;

Inoue discloses:

Wherein the insertion is a cartridge (figure 17) including an upper half (figure 17, item 13) and a lower half (figure 17, item 85) that face each other with a gap for housing a disk-shaped information medium placed therebetween (figure 15, item 11 is housed by cartridge), an opening window portion for exposing a part of the disk-shaped information medium through the upper half and/or the lower half (figure 15, item 87), a shutter for opening and closing the opening window portion (figure 15, item 18), a front wall engaged with the shutter to connect the upper half to the lower half, a first side wall and a second side wall respectively being connected to the upper half and the lower half and to the front wall, and a back wall facing the front wall (figure 16, upper half and lower half are connected with four sides, a top and a bottom);

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the cartridge of Khuu with a top and a bottom

half, as taught by Inoue, because this will house the cartridge and allow for opening of the shutter upon insertion, as noted in column 3, lines 13-27.

Regarding claim 4, Khuu and Inoue disclose the features of base claim 3, as stated in the 103 rejection above, and Inoue further disclosing:

Wherein each front edge of the upper half and the lower half, engaged with the front wall, forms an arc-shape (figure 16, front edge forms an arc), and the shutter includes an opening and closing engagement member (figure 22, item 84) for opening and closing the opening window portion by rotating along the arc-shape (sequence of figures 22-26), the opening and closing engagement member is provided in a full-length stepped groove having a step on the second side wall over an entire length of the first side wall substantially at a center between the upper half and the lower half on the first side wall (figure 17), has a first hole and a second hole (figure 22, items 44a & 44b) with which the second protrusion is engaged, and a gear portion (figure 22, item 41a) engaged with the rack between the first hole and the second hole (figure 22).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the cartridge of Khuu with a shutter opening mechanism, as taught by Inoue, because this will open the shutter as clearly displayed in figures 22-26.

Regarding claim 6, Khuu and Inoue discloses the features in common with those previously presented in claim 3, as stated in the 103 rejection above, and Khuu further disclosing:



Wherein the first partial stepped groove having a first bottom portion with a dent D8, and the second partial stepped groove having a second bottom portion with a dent D8 (figure 3, grooves [72] have a depth [D8]), and when the insertion is housed, a distance D9 between the first bottom portion and the second bottom portion is fit between the top face of the first rib and the top face of the second rib (figure 3, width of cartridge at grooves [72] is equivalent to D9).

Regarding claim 7, Khuu discloses the features of base claim 1, as stated in the 102 rejection above, but fails to specifically disclose:

A cover using, as a rotation axis, either edge of the first side plate parallel to the bottom plate, either edge of the second side plate parallel to the bottom plate, an edge of the bottom plate forming the entrance, an edge facing the edge of the bottom plate forming the entrance via the bottom plate, or either edge of the third side plate parallel to the bottom plate.

Inoue discloses:

A cover using, as a rotation axis, either edge of the first side plate parallel to the bottom plate (figures 22-26, the side wall serves for the axis of rotation of the shutter), either edge of the second side plate parallel to the bottom plate, an edge of the bottom plate forming the entrance, an edge facing the edge of the bottom plate forming the entrance via the bottom plate, or either edge of the third side plate parallel to the bottom plate.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the axis of rotation of the shutter on a side wall,

as taught by Inoue, because the shutter will open via a rack on the sidewall to rotate it, thereby providing an axis to rotate, as displayed in figures 22-26.

Regarding claims 8 and 9, Khuu and Inoue disclose the features in common with those previously presented in claim 3, as stated in the 103 rejection above, and further contains method limitations that are similar to or inherent from those limitations previously presented in claims 3 and 4, as stated in the 103 rejections above, therefore, claim 8 is met on the same basis.

Regarding claim 10, Khuu and Inoue disclose the features of base claim 9, as stated in the 103 rejection above, and further discloses the features in common with those previously presented in claim 4, and Inoue further disclosing:

A rotation suppressing portion for suppressing the opening operation of the shutter due to rotation by being engaged with the first hole (figure 15, item 32), and an engagement removal portion for removing the engagement between the rotation suppressing portion and the first hole (figure 17, item 37), and the rack contacts the engagement removal member to remove the engagement between the rotation suppressing portion and the first hole between the first step and the second step (column 18, lines 22-31).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a rotation suppression releasing member on the rack, as taught by Inoue, because the suppression of the rotating member can be released upon insertion, as described in column 18, lines 22-31.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew G. Kayrish whose telephone number is 571-272-4220. The examiner can normally be reached on 8am - 5pm M-F.

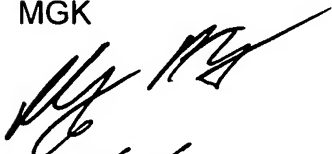
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

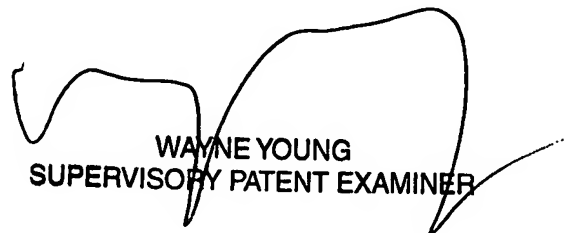
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Matthew G. Kayrish

6/1/2007

MGK

  
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WAYNE YOUNG  
SUPERVISORY PATENT EXAMINER